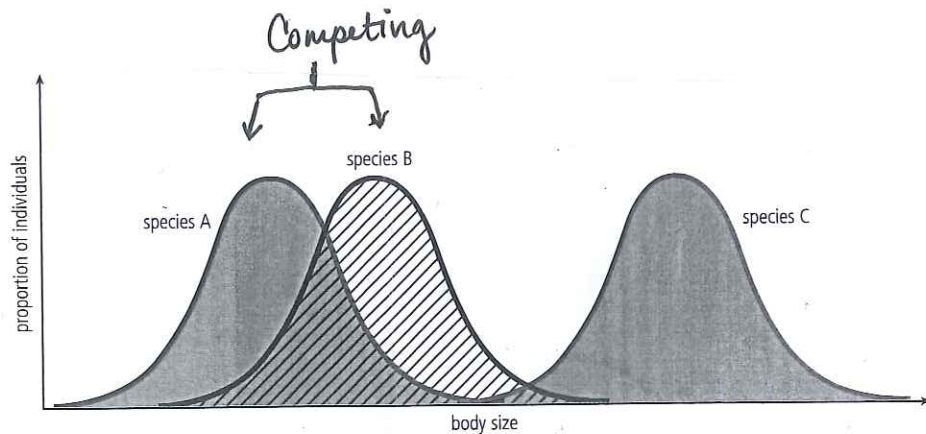


## Population Interactions

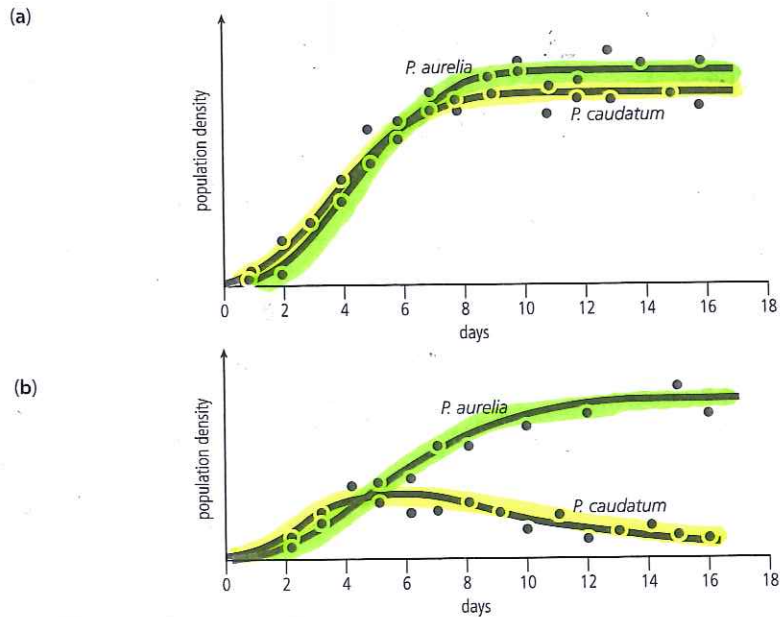
2.1.7 *Describe and explain* population interactions using examples of named species.

Type of Interaction		Symbol	Description	Example
Competition	Intraspecific	NA	Completion <u>within</u> the same population → impacts carrying capacity	• Bears competing for the same fish
	Interspecific	NA	Competition between different species	• Plants competing for the same light
Predation		+ -	One organism (predator) consumes another (the prey)	• Lion eats a deer • Pitcher plant traps & absorbs insects
Herbivory		+ -	An animal (an herbivore) eats a green plant. Plants have defenses (spines, poisons, etc) to protect themselves	• Elephant eats trees • Rabbits eat lettuce • Leaf miner insects eat leaves
Parasitism		+ -	One species (the parasite) lives in or on another organism (the host). The parasites try not to kill the host	• Hook worms • Vampire bats
Mutualism		+ +	Two organism both benefit from their relationship. Neither suffers	• Lichens (made of fungi & algae) • Protist that lives in Termite's stomach • Bacteria living on the roots of legumes • Sea anemones and clown fish

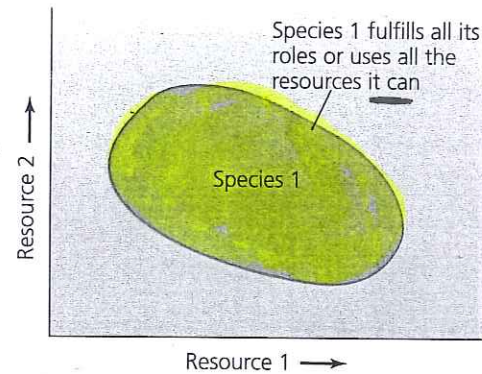
# COMPETITION - VISUAL REPRESENTATIONS



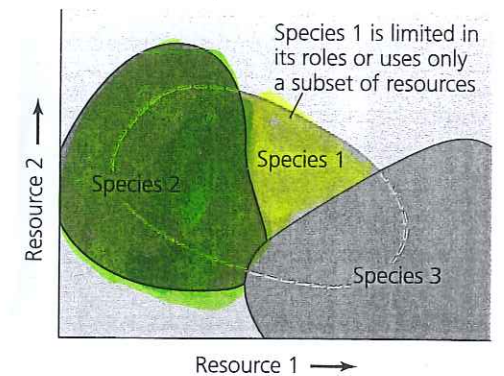
Experiments with single-celled animals have demonstrated the principle of competitive exclusion: if two species occupying similar niches are grown together, the poorer competitor will be eliminated (Figure 2.8).



Fundamental Niche



(a) Fundamental niche



(b) Realized niche

Realized Niche

# PREDATION

